Advanced Command, Control, Communication & Mission Management System

• Get the real-time situation picture
• Share information quickly
• Coordinate with others

HELIC³OM elevates helicopter C³ and Mission Management to new levels

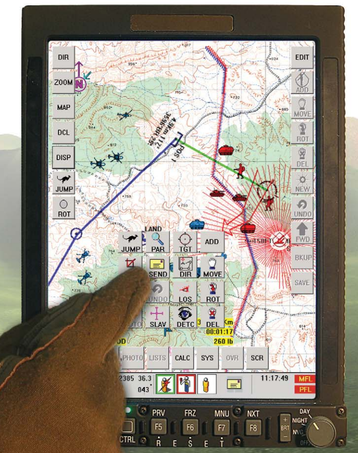
Elbit Systems' HELIC³OM is a next generation, fully digital, integrated Command, Control, Communications and Mission Management System designed to provide helicopter pilots and crew with data communications and transmissions; accurate, real time tactical pictures for enhanced situational awareness; and make the whole process easier, friendlier and more accessible than ever before.

HELIC³OM's advanced GUI and Digital Map features combine for optimal Mission Management capabilities. The modular system has been designed to grow as needs evolve, from a single helicopter, to formation, to an entire air force.

Already installed in a wide variety of platforms, HELIC³OM was developed by active pilots whose first-hand combat experience is incorporated into all facets of the system.

Assuring maximum ease and flexibility, HELIC³OM is an intuitive system, featuring

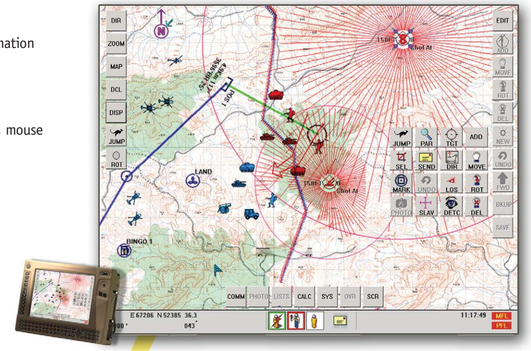
- Highly Graphical User Interface (GUI) with Mission Editing
- Touch Screen control
- Single hand Mouse/HOCAS operation



A total solution from preflight planning to in-flight revisions to postflight debriefing.

Portable Command & Control Station

- Tactical Situation Display
- Mission planning and transfer to formation
- Battle Management
- Air-to-Ground Communication
- Portable Tactical Computer:
  19" screen, input device, keyboard, mouse



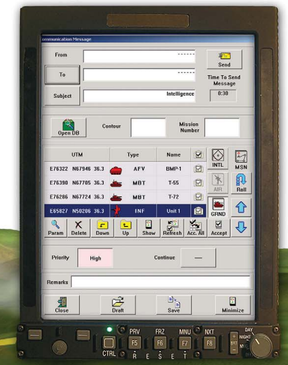
Advanced MMS - Mission Management System

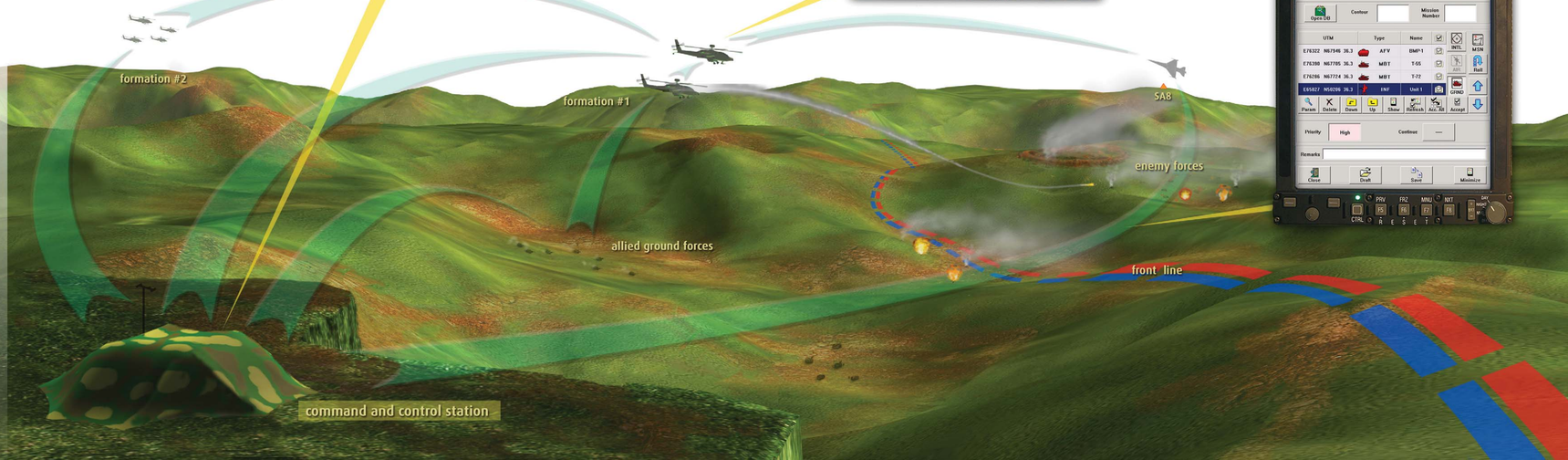
- Tactical Situation Display
- Situational Awareness

HELIC³OM gives helicopter pilots the whole picture and the tools to communicate, coordinate and exchange critical information with other battle participants "in a click."

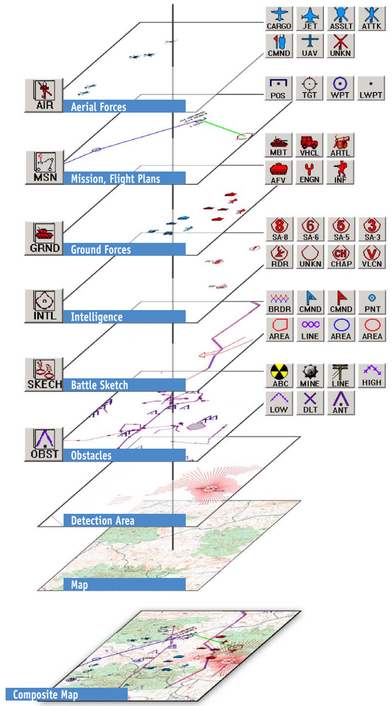
Advanced Data Link

- Digital data transmission using existing onboard radios - up to four independent data networks with voice communication override
- Data over Voice channel, Voice override
- Two data link types: position and basic helicopter status (automatic); mission data (on demand)
- Easy transfer of data through graphical representation
- Extensive defaults and presets





HELICOM *is the key to reduced crew workload, expanded operational capabilities and increased mission safety for today's multi-mission helicopters.*



Digital Moving Map – Tactical Situation Display

The Digital Moving Map presents all necessary tactical and navigational information resulting in the highest levels of situational awareness. The map assures enhanced navigation, obstacle avoidance, pre-and in-flight mission planning and features tactical information overlays for better tactical picture, battlefield control and coordination

- No maps to carry to the cockpit (Paperless Cockpit)
- Updates according to helicopter PP and orientation
- Digitized terrain elevation data
- Wide range of DMAP formats (digitized raster and vector maps; satellite and target aerial photos)
- Choice of Tactical Overlays – any combination is possible: flight plans, WP, LEG data, battle position, targets, obstacles, power lines, allied forces, aerial forces (own and enemy platform activity), threats, No Flight Zones, GRID, LOS.

Calculations Reduce Pilot Workload, Increase Crew Safety

- Mission Calculations – time, fuel, distance, bearing
- Map Calculations – LOS, Obstacles, LOS height, threats
- Performance Calculations – height, temperature, available power

Alerts, Warnings, Messages

- Vocal and Visual
- Synthetic voice alerts
- Threats, obstacles, No Flight Zones, Allies (IFF), Bingo, Fuel, PFL
- Masking capability

All system elements work together smoothly and swiftly for command of the facts, control of the situation, communication of critical information and heightened situational awareness.

Onboard Systems

Display

- 6"x8" LCD SVGA
- Touchscreen for data entry and system control
- Backup mouse-like pointing device; hard keys
- Day/Night NVG capability
- Installed in portrait layout
- Direct sun readable
- Supports digital video
- Dimensions: Height: 257 mm; Width: 190 mm; Depth: 48 mm
- Fitted to standard 5"x7" bezel
- Weight: 2.8 kg

Computer

- Pentium Processor
- 3D Graphic Display Accelerator
- Removable DB Storage
- 2 modems, capable of handling several separate networks
- Supports Ethernet interface and MUX BUS 1553, serial/discrete
- Dimensions: Height: 252 mm, Width: 170 mm, Depth: 345 mm
- Weight: 12.8 kg

Data Transfer System (DTS)

- Type 2 PCMCIA drive
- COTS PCMCIA cartridge
- Loading preflight mission data
- DZUZ mount
- Dimensions: Height: 66.6 mm; Width: 146 mm; Depth: 193 mm
- Weight: 2 kg

Preflight planning and training

- Mission rehearsal
- Preflight planning: route, waypoints, targets and positions
- Paperless (computerized) checklist, photos and reports
- DTC loading
- Database updating

Postflight debriefing

- Recording events and DB
- Data saved on HD and DTC
- Fully equipped Ground Station
- Debriefing at command post – pilot/maintenance faults list, helicopter data

Elbit Systems Ltd

Advanced Technology Center, P.O.Box 539, Haifa 31053, Israel Tel: 972-4-8315315
Fax: 972-4-8550002 **Website:** http://www.elbit.co.il **Email:** elbit-systems@elbit.co.il

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